

MATERIAL DATA SHEET – ACOUSTIC WOOD WOOL

BAUX ACOUSTIC WOOD WOOL PRODUCTS

BAUX Acoustic Wood Wool is a functional, natural material made from two of the world's oldest building materials, wood and cement. The combination is simple and ingenious. Wood fiber offers excellent insulation, heat retention and sound absorption. BAUX is made from certified wood – FSC® and PEFC™ – guaranteeing that it can be traced back to responsible forestry operations. Cement, a proven and popular building material, is the binder that provides strength, moisture resistance and fire protection. Therefore, BAUX Acoustic products are versatile and durable in all climates.

COMPOSITION OF INGREDIENTS

Ingredient	CAS	Share (%)	Function	Origin	Supplier	Certificates / other
(1) PORTLAND CEMENT	65997-15-1	48%	Binder	SE & DK (20%/80%)	Cementa	
(2) WOOD SWEDISH FIR		35%	Sounds absorber, visual look	Sweden (SE)	Own forest	FSC & PEFC
(3) LIMESTONE POWDER	471-34-1	17%	Binder	Sweden (SE)	Nordkalk	
(4) PAINT, WATER BASED		<1%	Visual Look	Finland (FI)	Teknos	Group M1, The Swan

PHYSICAL APPEARANCE & PERFORMANCE

Appearance:	Interior/Exterior wall or ceiling panels	Thermal resistance	RD m ² ·K/W = 0,294 (25mm) 0,588 (50 mm) and 0,823 (70 mm)
Colors:	Unpainted or painted – see next page	Thermal conductivity	λ _{average} 0,085 W/m°C (25 mm thickness)
Odor:	None	Steam coefficient permeability.	4 - 5 x 10 ⁻⁶ m ² /s.
Solubility in water:	None	Air permeability	~20 m ³ /m ² hPa
Density:	~300 kg/m ³ (11 kg/m ² = 2.25 lbs/ft ² t25mm)	Light Reflection	Unpainted 43%, White Painted 69% (lower for darker colors)
Dust:	(1) No measurable particle attraction	Tensile Strength	0,007 MPa
Emissions:	(2) < 1µg/m ² x h	Compression strength	0,4 MPa
Asbestos release:	No content	Flexural Strength	0,7 MPa
Recycled content:	None	Deformation	4 mm (0.05 MPa pressure), 5 mm (0.10 MPa pressure)
Harmful additives:	None	TVOC emission rate (µg/m ² h):	14/33 (unpainted/painted)*
Red list chemicals:	None	VVOC emission rate (µg/m ² h):	97*
Product life time:	50 years	SVOC emission rate (µg/m ² h):	< 2*
		Formaldehyde (µg/m ² h)	< 1*

(1) RNK & Sitac blasted 10 year old tiles with air jet (2) Swedish Institute of Technical Research - Protocol 90K10102 * measured after 28 days, report RISE Research Institutes of Sweden AB

REACTION TO FIRE & STANDARDS

Classification	A-Classed according to ASTM E84 standard (Flame spread Index = 0 Smoke developed index = 0) B-s1, d0 according to EN 13823 EN ISO 11925-2
Extinguishing media	Water, Carbon Dioxide, Foam or Dry Chemical
Harmonized standard	SS-EN 13168:2012+A1:2015 - Thermal insulation products for buildings, factory made wood wool products SS-EN 13964:2014 - Suspended Ceilings
Stability and reactivity	Stability: Stable, Conditions to avoid: None known

ACOUSTICAL CHARACTERISTICS

Installation method		α _w	NRC	SAA	Class	Absorption coefficient	
Direct Mounted on Concrete Wall	1	BAUX 25mm Any shape	0.30	0.40	0.41	D	
	2	BAUX 3D PIXEL Equal amount of t25/t50/t70 mm	0.50 (MH)	0.60	0.62	D	
	3	BAUX 25mm 40 mm Stone Wool	1.0 (H)	0.95	0.95	A	
Air Slot between Concrete Wall and BAUX material	4	BAUX 25 mm 200 mm slot	0.50 (H)	0.45	0.46	D	
	5	BAUX 25mm + 40 mm Stone Wool 200 mm slot	0.90 (H)	0.90	0.90	A	

α_w = Weighted sound absorption coefficient NRC = Noise Reduction Coefficient SAA = Sound Absorption Average (ASTM C423)







Stone Wool in use: 40mm stone wool panel 140 kg/m³ Using Stone Wool as backing may require screws to fix the tiles appropriately, or a frame around the tiles

BAUX

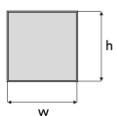
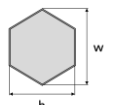
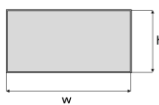
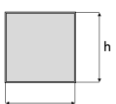
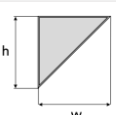
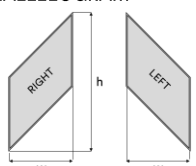
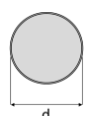
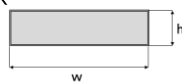
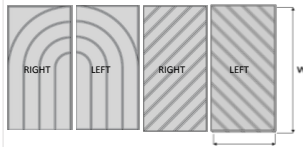
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BAUX MATERIAL DATA SHEET

PRODUCTION & CERTIFICATES

Production locations	Raw material: Ydre, Sweden Finishing: Ydre, Sweden & Maryland, USA				
Waste in production	80% of waste (wood wool) from production is used for heating of the factory and the drying plant. No waste for the timber log.				
Regulation/protocol (VOC Test Report Indoor Air Comfort GOLD)	French VOC Regulation		Indoor Air Comfort GOLD®	Pass	
	French CMR components	Pass	EN 717-1§	E1	
	AgBB/ABG	Pass	BREEAM International	Compliant	
	Belgian Regulation	Pass	LEED v4 (outside U.S.)	Compliant	
	Indoor Air Comfort®	Pass	BREEAM® NOR	Pass	
Collaborations & supplier certificate	 SundaHus <small>*Sundahus rating: A</small>				

PRODUCT DIMENSIONS

3D PIXEL		w [mm]	h [mm]	t [mm]	pieces/m ²	w [~inch]	h [~inch]	t [~inch]	pieces/sq.ft.
	t25	290	290	25	11.89	11.42	11.42	1.0	1.10
	t50	290	290	50	11.89	11.42	11.42	2.0	1.10
	t70	290	290	70	11.89	11.42	11.42	2.75	1.10
HEXAGON		w [mm]	h [mm]	t [mm]	Pieces/m ²	w [~inch]	h [~inch]	t [~inch]	pieces/sq.ft.
	Mini	220	190	25	31.29	8.66	7.48	1.0	2.91
	Small	290	250	25	17.82	11.42	9.84	1.0	1.66
	Large	580	500	25	4.45	22.84	19.68	1.0	0.41
RECTANGLE		w [mm]	h [mm]	t [mm]	pieces/m ²	w [~inch]	h [~inch]	t [~inch]	pieces/sq.ft.
	Small	580	290	25	5.95	22.84	11.42	1.0	0.55
	Large	1160	580	25	1.49	45.7	22.84	1.0	0.14
SQUARE		w [mm]	h [mm]	t [mm]	pieces/m ²	w [~inch]	h [~inch]	t [~inch]	pieces/sq.ft.
	Small	290	290	25	11.89	11.42	11.42	1.0	1.10
	Large	580	580	25	2.97	22.84	22.84	1.0	0.28
TRIANGLE		w [mm]	h [mm]	t [mm]	pieces/m ²	w [~inch]	h [~inch]	t [~inch]	pieces/sq.ft.
	Small	290	290	25	23.78	11.42	11.42	1.0	2.21
	Large	580	580	25	5.95	22.84	22.84	1.0	0.55
PARALLELOGRAM		w [mm]	h [mm]	t [mm]	pieces/m ²	w [~inch]	h [~inch]	t [~inch]	pieces/sq.ft.
	Small	290	580	25	11.89	11.42	22.84	1.0	1.10
	Large	580	1160	25	2.97	22.84	45.7	1.0	0.28
CIRCLE		diameter [mm]	t [mm]	pieces/m ²	diameter [~inch]	t [~inch]	pieces/sq.ft.		
	Small	290	25	15.14	11.42	1.0	1.41		
	Large	580	25	3.78	22.84	1.0	0.35		
PLANK		w [mm]	h [mm]	t [mm]	pieces/m ²	w [~inch]	h [~inch]	t [~inch]	pieces/sq.ft.
	Small	580	145	25	11.89	22.84	5.71	1.0	1.10
	Large	1160	290	25	2.97	45.7	11.42	1.0	0.28
PANEL		w [mm]	h [mm]	t [mm]	pieces/m ²	w [~inch]	h [~inch]	t [~inch]	pieces/sq.ft.
	All shapes ⁽¹⁾	1160	580	25	1.49	45.7	22.84	1.0	0.14

(1) BAUX PANELS are available in 7 different surface structures. DIAGONAL (left & right), QUILTED, CHECK, LINES, STRIPES, ARCH and CURVE (left & right). Visit www.baux.se for more info

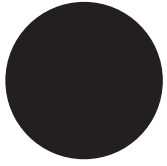
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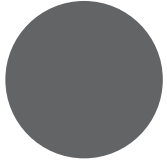
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BAUX STANDARD AND INITIAL COLOR COLLECTION

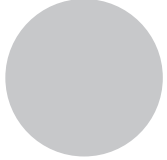
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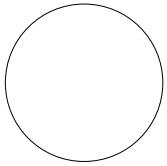
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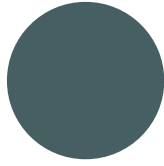


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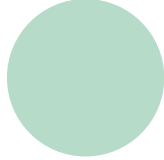
WOODS



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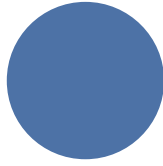


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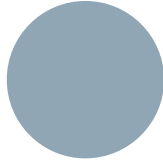


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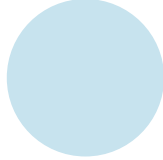
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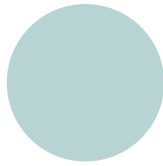
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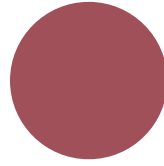


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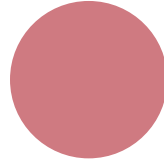


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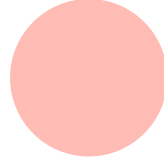
HEAT OF THE SUN



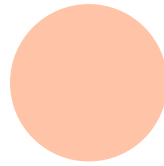
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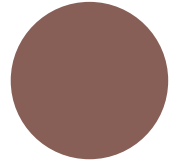


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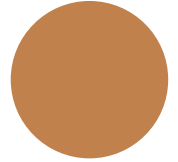


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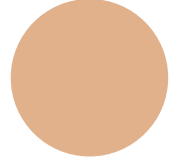
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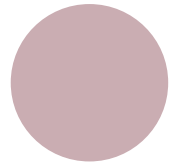
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NCS 3050-Y40R



NCS S 2030-Y40R



NCS S 1510-R40B